

September 28, 1946.

Dear Dr. Edwards:

Since our last correspondence, a copy of Kauffmann's book has come into my possession, and I discovered in it a discussion of investigations on Salmonella nutrition such as I had not previously suspected. This is particularly interesting because the group of strains that I have been working on so far has been highly discouraging - with the exception of a para A and a cholerae suis strain that I have already mentioned, and pullorum and gallinarum, most or all seem to grow quite well on a glucose asparagine medium, or with the addition of thioglycollate. However, this literature suggests that there are a number of organisms which would turn out to have useful nutritional requirements- those which will not grow on Simmons' glucose agar. For example, 11 IV variants of typhi-murium which you reported on in 1939. According to Kauffmann's review other strains which may satisfy this criterion are abortus ovis, typhi suis, and sendai. (I notice this last named as a subject again of one of your investigations where this test was one of the differentials separating sendai from miami.

You should be doing this investigation a great service if you were to send me a collection (as extensive as you can conveniently manage) of strains which fail to grow on minimal media such as Simmons' agar. In the meantime, I am working on developing nutritional mutants of typhi-murium. That is quite a time-consuming affair, ~~xxxxxx~~

With the most sincere appreciations,                      Sincerely yours,

Joshua Lederberg